## PATENT ABSTRACTS OF JAPAN

(11)Publication number:

07-000770

(43)Date of publication of application: 06.01.1995

(51)Int.CI.

B01D 63/02 B01D 65/02

(21)Application number : 05-145823

\_\_\_\_

(22)Date of filing:

17.06.1993

(71)Applicant : TOSHIBA CORP

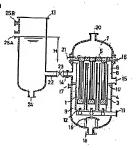
(72)Inventor: ITO KIYOSHI

## (54) HOLLOW-FIBER MEMBRANE FILTER AND ITS CLEANING METHOD

## (57)Abstract:

PURPOSE: To obtain a hollow-fiber membrane filter with the differential pressure recovery rate enhanced and the service life prolonged and capable of filtering even a difficult-to-filtrate water.

CONSTITUTION: A filter 11 is divided by a tube plate 5 into a treated water section 6 and a filtration water section 7. A hollow-fiber membrane module 1 formed by bundling many hollow-fiber membranes is suspended from the tube plate 5. The treated water section 6 is divided by a partition plate 10 into an upper section 8 and a lower section 9. A cylinder 3 for protecting the module 1 is fixed to the partition plate 10. A bubble injection nozzle 12 is provided below the cylinder 3. A head tank 13 communicating with the upper section 8 and having a head difference H from the upper section 8



and having a head difference H from the upper end of the cylinder 3 to about 1/2 of the length of the membrane 1 is furnished

## **LEGAL STATUS**

[Date of request for examination]

30.08 1999

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than